

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1-8. (Cancelled)

9. (Currently Amended) ~~The A method of claim 8, wherein~~  
said for producing a small group of maladapted non-human animals  
characterized by post-traumatic stress disorder (PTSD)-like  
behavior from a larger group of animals by behavioral  
conditioning, the method comprising: (a) determining an  
individual baseline behavioral level and at least one biological  
parameter is selected from the group consisting of a Wolframin  
level and a Sigma 1 receptor level for each one of an individual  
animal in the larger group after a period of habituation to a  
defined set of conditions; (b) exposing each one of said  
individual animal in the larger group to a trauma event and  
further determining an individual posttraumatic event behavioral  
level and the level of said at least one biological parameter for  
each of said individual animal; (c) re-exposing each of said  
individual animal in the larger group to a trauma related event  
and further determining an individual post trauma related event  
behavioral level and the level of said at least one biological  
parameter for each individual animal; (d) evaluating said  
individual post trauma related event behavioral level and the

level of said at least one biological parameter for each individual animal with respect to at least one baseline value according to a predetermined rule in order to determine which of said individual animal in the larger group belong to the small group of maladapted animals characterized by PTSD-like behavior.

**10. (Currently Amended)** The method of claim ~~6~~ 29, wherein said determining an individual baseline behavioral level, said further determining an individual post traumatic event behavioral level, further determining an individual post trauma related event behavioral level are each independently accomplished by analysis of videotapes of a defined behavior of said individual animal under controlled conditions.

**11-12. (Cancelled)**

**13. (Original)** The method of claim 10, further comprising at least one repetition of said re-exposing each of said individual animal in the larger group to a trauma related event and of said further determining an individual post trauma related event behavioral level for each individual animal.

**14-15. (Cancelled)**

**16. (Original)** A method for screening a candidate compound for PTSD treatment, the method comprising: (a) producing a small group of individually evaluated maladapted non-human animals characterized by PTSD like behavior from a larger group of animals wherein an individual in said small group is

correlatable to a corresponding individual behavioral profile;  
(b) identifying each of said individuals in said small group of individually evaluated maladapted non-human animals characterized by PTSD like behavior; (c) administering a candidate compound to at least a portion of said individuals in said small group; (d) determining an effect of said candidate compound on each of said individuals in said at least a portion of said small group with respect to said corresponding individual behavioral profile.

**17. (Original)** The method of claim 16, further comprising measuring at least one biological parameter in each of said individually evaluated maladapted non-human animals.

**18. (Original)** The method of claim 17, wherein said at least one biological parameter is selected from the group consisting of a Wolframin level and a Sigma 1 receptor level

**19. (Original)** The method of claim 16, further comprising applying an accepted statistical analysis to a pool of data pertaining to said effect of said candidate compound on each of said individuals in said at least a portion of said small group with respect to said corresponding individual behavioral profile.

**20. (Previously Presented)** The method of claim 16, further comprising administering a control compound to at least a portion of said individuals in said small group.

**21. (Original)** The method of claim 20, wherein said control compound includes at least one compound selected from the group consisting of a negative control compound and a compound with a previously characterized efficacy in treating PTSD.

**22. (Original)** The method of claim 16, wherein the method is performed as iterated and wherein the treatment is a therapeutic treatment.

**23. (Original)** The method of claim 16, wherein the treatment is a prophylactic treatment.

**24. (Original)** A method for screening a candidate compound for prophylactic PTSD treatment, the method comprising: (a) establishing a method for producing a small group of maladapted non-human animals characterized by PTSD like behavior from a large group of animals by behavioral conditioning; (b) employing statistical methods to determine a confidence interval for a relative size of said small group of maladapted non-human animals characterized by PTSD like behavior with respect to a size of said large group of animals; (c) administering the candidate compound to a subsequent large group of animals subjected to said method for producing a subsequent small group of maladapted non-human animals characterized by PTSD like behavior; and (d) determining whether a relative size of said subsequent small group of maladapted non-human animals characterized by PTSD like behavior with respect to a size of

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said subsequent large group of animals falls within said confidence interval.

**25. (Original)** A method for screening a candidate compound for PTSD treatment, the method comprising: (a) establishing a method for producing a small group of maladapted PTSD like non-human animals from a large group of animals by behavioral conditioning; (b) measuring at least one biological parameter for each animal in said small group of maladapted PTSD like non-human animals; (c) employing statistical methods to: (i) determine a first confidence interval for a relative size of said small group of maladapted PTSD like non-human animals with respect to a size of said large group of animals; (ii) determine a second confidence interval for said at least one biological parameter for said small group of maladapted PTSD like non-human animals; (d) administering the candidate compound to a subsequent large group of animals subjected to said method for producing a subsequent small group of maladapted non-human animals characterized by PTSD like behavior; and (e) determining whether a relative size of a subset of said subsequent large group of animals characterized by a value for said at least one biological parameter which falls within said second confidence interval falls within said first confidence interval; and (f) concluding that: (i) the candidate compound is effective in ameliorating PTSD if said relative size of said subset of said subsequent

large group of animals characterized by a value for said at least one biological parameter which falls within said second confidence interval is below a lower bound of said first confidence interval; or (ii) the candidate compound is not effective in ameliorating PTSD if said relative size of said subset of said subsequent large group of animals characterized by a value for said at least one biological parameter which falls within said second confidence interval is above a lower bound of said first confidence interval.

**26. (Original)** The method of claim 25, wherein said at least one biological parameter includes at least one item selected from the group consisting of a Wolframin level and a Sigma 1 receptor level.

**27. (Original)** A method for screening a candidate compound for PTSD treatment, the method comprising employing known statistical methods to perform an analysis which is logically similar to the method of claim 25.

**28. (Cancelled)**

**29. (Currently Amended)** ~~The A method of claim 6,~~  
wherein for producing a small group of maladapted non-human animals characterized by post-traumatic stress disorder (PTSD)-like behavior from a larger group of animals by behavioral conditioning, the method comprising: (a) determining an individual baseline behavioral level for each one of an

individual animal in the larger group after a period of  
habituation to a defined set of conditions; (b) exposing each one  
of said individual animal in the larger group to a trauma event  
~~said exposing of (b) of each one of said individual animal to a~~  
~~trauma event occurs~~ at least 21 days following the start of  
habituation and further determining an individual posttraumatic  
event behavioral level for each of said individual animal; (c)  
~~and said re-exposing of (c) of each of said individual animal in~~  
~~the larger group~~ to a trauma related event occurs at least 7 days  
following said exposure to a trauma event and further determining  
an individual post trauma related event behavioral level for each  
individual animal; (d) evaluating said individual post trauma  
related event behavioral level for each individual animal with  
respect to at least one baseline value according to a  
predetermined rule in order to determine which of said individual  
animal in the larger group belong to the small group of  
maladapted animals characterized by PTSD-like behavior.

**30 (Previously Presented)** The method of claim 13,  
wherein said at least one repetition of said re-exposing of said  
individual animal to a trauma related event occurs between 14  
days and 90 days following said exposing to a trauma event.

**31 (Currently Amended)** The method of claim 29, wherein  
said exposing of (b) of each one of said individual animal to a  
trauma event occurs 23 days following the start of habituation

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and said re-exposing of (c) of each of said individual animal to a trauma related event occurs 7 days following said exposure to a trauma event.

**32 (Previously Presented)** The method of claim 30, wherein said at least one repetition of said re-exposing of said individual animal to a trauma related event occurs 23 days following said exposing to a trauma event.